

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on July 24, 2007.

Permit Number: **R30-00300042-2007**

Application Received: **November 4, 2010**

Plant Identification Number: **03-54-003-00042**

Permittee: **Quad/Graphics, Inc.**

Facility Name: **Martinsburg Plant**

Mailing Address: **855 Caperton Boulevard, Martinsburg, WV 25401**

Permit Action Number: *MM02* Revised: *May 13, 2011*

Physical Location:	Martinsburg, Berkeley County, West Virginia
UTM Coordinates:	247.0 km Easting • 4,377.0 km Northing • Zone 18
Directions:	I-81 to Exit 16 (Route 9 West) to County Route 1. Turn right into Cumbo Yard Industrial Park.

Facility Description

Quad/Graphics (Quad) is a commercial printing business permitted for 18 rotogravure presses, 21 carbon adsorbers, 6 natural gas/propane fueled boilers, 3 hard chromium electroplating tanks and scrubbers, 15 solvent/ink storage tanks, 12 offset lithographic presses with catalytic oxidizers or regenerative thermal oxidizers, 1 cylinder cleaning unit, finishing/inkjet production, and an ink blend operation involving 11 storage tanks, 7 mixing tanks, and 3 totes. Not all of the permitted equipment has been installed. Quad/Graphics has installed 11 rotogravure presses, 13 carbon adsorbers, 4 natural gas/propane fueled boilers, 2 hard chromium electroplating tanks, 14 solvent/ink storage tanks, 3 offset lithographic presses (2 with thermal oxidizers and 1 with a catalytic oxidizer), 1 cylinder cleaning unit, finishing/inkjet production, and an ink blend operation consisting of 11 storage tanks, 7 mixing tanks, and 3 totes. Quad/Graphics Standard Industrial Classification (SIC) Code is 2752, 2754, and 2893 and the corresponding North American Industry Classification System (NAICS) code is 323110, 323114, and 325791.

This Title V minor modification permit incorporates changes permitted under R14-0012D and R14-0012E. R14-0012D is a Class II Administrative Amendment that was issued on December 22, 2010 to manufacture and ship additional quantities of finished ink and ink concentrates to other Quad/Graphics facilities. This action does not involve the installation of any new equipment but require increasing permitted throughput of: (1) existing storage tanks T-11 through T-15 (using them now for ink manufacturing instead of rotogravure ink storage) and R2, and (2) an increase in the throughput of manufactured ink loadout operations.

R14-0012E is a Class I Administrative Amendment that was issued on February 15, 2011 to replace a Rotogravure press (Emission Unit ID G-20) that was heavily damaged by fire and removed in 2009 with a new Rotogravure press (Emission Unit ID G-28) that is similar to G-20. G-28 was acquired from a recent Quad acquisition and moved to G-20 press bay. There will be no change in emissions. They are requesting that a name change from G-20 to G-28.

Emissions Summary

This modification results in the following emission rates changes:

Plantwide Emissions Summary [Tons per Year]				
Criteria Pollutants	Potential Emissions	MM01 Emissions	MM02 Emissions	Revised Emissions
Carbon Monoxide (CO)	92.43			92.43
Nitrogen Oxides (NO _x)	104.82			104.82
Particulate Matter (PM ₁₀)	10.79			10.79
Total Particulate Matter (TSP)	10.79			10.79
Sulfur Dioxide (SO ₂)	2.40			2.40
Volatile Organic Compounds (VOC)	1,935.65	-11.79	0.11	1,923.97
<i>PM₁₀ is a component of TSP.</i>				
Hazardous Air Pollutants	Potential Emissions	MM01 Emissions	MM02 Emissions	Revised Emissions
Toluene	1,618.92	-11.2100	0.11	1,607.82
Xylene	8.30	-0.0294	0.001	8.2716
Ethyl Benzene	2.34	-0.00218		2.3378
Chromic Acid	0.00217			0.00217
Naphthalene	0.16			0.1600
Methanol	0.02			0.0200
Cumene	0.02	-0.0163		0.0037
Glycol Ether	0.00			0.0000
1,2,4 or 1,2,5-Trimethylbenzene	4.43			4.4300
Total HAPs	1,634.19	-11.26	0.11	1,623.0453
Toluene Loadout	0	0	1.40	1.40

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons of criteria pollutants (VOC and NO_x), over 10 tons of a single HAP (Toluene) and over 25 tons of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Quad/Graphics is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR14	Permits for construction and major modification of major stationary sources of air pollution for the Prevention of Significant Deterioration.
	45CSR30	Operating permit requirement.

State Only: None

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R14-0012E	February 15, 2011	
Class I Administrative Amendment to replace press G20 with G28		
Supersedes R14-0012D		
Issued: December 22, 2010		
Class II Administrative Amendment to manufacture and ship additional quantities of ink		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

Since the most recent Title V permit [R30-00300042-2007(MM01)], there have been two R14 issued, R14-0012D and R14-0012E.

1. NSR permit, R14-0012D, is:

- a. To increase in the permitted throughput of the existing storage tanks T-11 through T-15 (using them now for ink manufacturing instead of rotogravure ink storage) and R2.
 - b. To increase permitted throughput of manufactured ink loadout operations.
 - c. No new equipment was proposed for this project.
2. NSR permit, R14-0012E, is for the removal of Rotogravure Press (Emission Unit ID G-20) permanently from service since it was destroyed by fire. The Rotogravure Press G-20 will be replaced with a Rotogravure Press (Emission Unit ID G-28) that was acquired from a recent Quad acquisition.

There are 11 presses on-site, with the permit allowing for seven (7) more to be installed: G-29 through G-35, see Sections 1.1, 4.0, and 4.1.1. The heading in Sections 4.0 and 4.1.1 Table were revised by removing G-20 and adding G-31 through G-35.

3. The Title V Emission Unit Table, Section 1.1, updates:
- a. Deleted G-20 from the *Publication Rotogravure printing Presses* subdivision.
 - b. Revised G-28 of the *Publication Rotogravure printing Presses* subdivision.
 - c. Inserted G-31 through G-35 in the *Publication Rotogravure Printing Presses* subdivision.
 - d. Relocated Tanks T-11 through T-15 from the *Publication Rotogravure Printing Presses* subdivision to the *Ink Blending Facility* subdivision.
4. G-31, G-31, G-32, G-33, G-34 and G-35 were added to the Section 4.0 heading and G-20, T-11, T-12, T-13, T-14, and T-15 were removed from the Section 4.0 heading.
5. G-20 was removed from the Section 4.1.1 table, the source description for G-28 was revised and G-31, G-31, G-32, G-33, G-34 and G-35 were added to the table. G-35 was inadvertently left out of the current NSR permit. The language was also revised in Section 4.1.1 to concur with the latest R14 permit.
6. The language was revised in Sections 4.1.7, 4.1.8, and 4.1.9 to concur with the latest R14 permit.
7. The language was revised in Sections 5.1.1, 5.1.5, 5.1.7, and 5.1.11 to concur with the latest R14 permit.
8. T-11, T-12, T-13, T-14, and T-15 were incorporated in the Section 6.0 heading.
9. T-11, T-12, T-13, T-14, and T-15 were relocated from the table in Section 4.1.7 to the table in Section 6.1.1. The language was also revised in Section 6.1.1 to concur with the latest R14 permit.
10. T-11, T-12, T-13, T-14, and T-15 were removed from Section 4.1.8 since their function has change from rotogravure ink storage to ink manufacturing and their throughput will increase (see Section 6.1.2.). The language was also revised in Section 6.1.2 to concur with the latest R14 permit.
11. The language was revised in Section 6.1.3 to concur with the latest R14 permit.

12. The amount of ink concentrates produced and loaded out for the coated and uncoated extenders were added to the *Ink Concentrate Manufacturing and Loadout Limits* table in Section 6.1.6. The Maximum Amount Loaded Out Per Year in gallons per year for each product was revised in Section 6.1.6 to concur with the latest R14 permit.
13. Condition 4.1.3 (j) of R14-0012D (Section 6.1.10.) has been removed. This condition is for limiting emissions from the ink manufacturing and has been incorporated in Appendix A of the current NSR permit and Title V modification.
14. The language was revised in Sections 7.1.1, 8.1.1, 9.1.2, and 9.1.3 to concur with the latest R14 permit.
15. *The Solvent Recovery System* of Appendix A was revised to correspond with the current R14 permit.
16. R14-12 that is in the citations of Sections 3.0 through 10.0, in the headings of Appendix A and B, and in the body of Sections 3.5.10.3, 5.1.6, 9.1.1, 9.1.2, 10.3.1, and 10.5.1 was revised to R14-0012.
17. Quad/Graphics has not made any modifications at the Martinsburg facility that would trigger a PSD permit for a GHG Clean Act requirement.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

None

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Not Applicable for minor modifications.
Ending Date: N/A

All written comments should be addressed to the following individual and office:

Wayne Green
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Wayne Green
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1258 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.